

REMARKS

The Examiner copied the prior Office Action verbatim as regarding the 35 U.S.C. 102 and 103 rejections, complete with typographical errors, and dropped the objection to claims 4, 11 and 12. As a result the Examiner did not address claims 4, 11 and 12 in the present Final Office Action. Are Applicants to assume that claims 4, 11 and 12 are allowable even though the cover sheet indicates that all claims 1-13 are rejected? How are Applicants to argue for patentability if the grounds for the rejection of these overlooked claims are not specified?

Applicants' claimed invention is a method of setting up a communication procedure between instances (TC_2, IUT_1), or hardware nodes, which is started by selecting (Fig. 1) the instances to take part in the communication procedure, where one instance is a protocol tester that emulates a component. Then a protocol layer ("isdnl2" – isdn layer 2) to be emulated by the protocol tester for testing the corresponding protocol layer in the IUT_1 is selected (Fig. 2) from among several candidate protocol layers. Next abstract communication interfaces (Service Access Point -- SAP) of the emulated protocol layer are selected (Fig. 3). The communication data contained in description files to be exchanged at the abstract communication interfaces are selected as the final step in the selection process (Fig. 4). From these selections the code for execution by the protocol tester is automatically generated, i.e., the communication procedure is setup according to the selections made by the user through the graphical user interface. In this way the user specifically tests a single one of the protocol layers in the instrument under test.

In contradistinction to Applicants' claimed invention Gessel discloses a system and method for testing OSI layers 3-7 of a communications protocol used between hardware nodes in a telecommunications network, the system including a protocol simulator for OSI layers 3-7, a LAN connected to the simulator with a first socket interface that replaces layers 1 and 2, and a target telecommunication node connected to the LAN with a second socket interface to perform operations to validate the use of the communications protocol with the target telecommunication node.

Gessel may best be understood with the specific example shown in Fig. 7 where a protocol simulator 73 is selectively coupled via a LAN 79 to either a hardware device 71 or an emulator 72 as determined by a communications manager 74. The proper protocol simulation software and protocol stack for the selected device are selected by a protocol simulator adaptor 75. Messages according to the communication protocol are then sent from the protocol simulator via the LAN by compiling the messages into TCP/IP format for transmission via a UNIX socket 78. The messages exit the LAN via another UNIX socket 81 and are directed to a UNIX adaptor 82 to recover the messages from the TCP/IP format in the communication protocol which is understood by the hardware device. There is no selection of a protocol layer to be emulated in order to test a corresponding protocol layer as Gessel tests the entire protocol stack layers 3-7, i.e., the communication protocol *in toto*, not a corresponding protocol layer as is recited by Applicants in claims 1 and 8.

Also there is no discussion in Gessel of the abstract communication interfaces

of the emulated layer, i.e., the service access points between protocol layers – between the emulated protocol layer and the corresponding protocol layer being tested. Further there is no discussion in Gessel of the communication data that is exchanged at the abstract communication interfaces. Therefore Gessel does not in fact select the abstract communication interfaces or communication data for exchange at the abstract communication interfaces as recited in claims 1 and 8 as Gessel does not test any protocol layer corresponding to one being emulated by the tester. Therefore there is no reason for Gessel to select the SAPs between layers and the communication data to be exchanged across such SAPs.

The Examiner states that Gessel teaches the selection of a protocol layer because it allows the user to select the protocol hardware nodes that are tested by the emulating software. The hardware nodes being selected are the respective hardware devices, the tester and the device under test, and the only selection is of the overall communication protocol (SS7) required for communication between the two. By selecting the hardware nodes the user does not select “a protocol layer”, which infers as few as one. Gessel only talks about emulating for the purpose of testing OSI layers 3-7 which excludes testing only a single one of the protocol layers.

The Examiner further states that Gessel teaches all parameters selected by all the selecting means are assigned description files that are used by the setting up means, referring to the fact that there is a test script that indicates an SS7 call procedure which is then converted into the appropriate protocol layers 3-7. However, despite the Examiner’s conclusion, these are not the same as selecting specific

SAPs and communication data, as opposed to call procedures. The Examiner admits that Gessel does not teach selecting the abstract communication interfaces and communication data for exchange at the interfaces. This is because no such selection is necessary unless only a single one of the protocol layers is being tested, which as indicated above is not the case for Gessel.

Matsui at best merely discloses the selection of PDUs, and not the particular “abstract communications interfaces of the emulated protocol layer” (notice the claim language is singular and not plural). Therefore even combining Matsui with Gessel does not produce a protocol tester that is able to automatically code a test for a particular protocol layer of an instrument under test based upon selecting a protocol layer, abstract communication interfaces and communication data to be exchanged at the abstract communication interfaces for the emulated protocol layer. Thus claims 1 and 8, together with claims 2-7 and 9-13 dependent therefrom, are deemed to be allowable as being neither anticipated nor rendered obvious to one of ordinary skill in the art by Gessel, either alone or in combination with Matsui.

If the Examiner has a problem with the word “specified” in claim 1, Applicants are willing to accept in its stead by Examiner’s amendment the word “corresponding”. Applicants submit that there is ample basis in the specification for one of ordinary skill in the art to understand that Applicants provide the ability for testing a single protocol layer as opposed to the entire protocol stack.

In view of the foregoing remarks allowance of claims 1-13 is urged, and such action and the issuance of this case are requested.

Respectfully submitted,

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